

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 08/25/2008 have been fully considered but they are not persuasive.

At page 8, Applicant argues that the cited references do not disclose the feature of "an inverse DCT circuit for inversing DCT on the decoded coefficient data." In response, the Examiner respectfully disagrees.

Jones in column 133, line 35 – column 135, line 3 discloses a set of registers used in each decoder, in which inverse DCT is used. This is further described at least in column 216, line 35 – column 220, line 45, in which an equation for inverse DCT that shows the formula to convert inverse DCT coefficients from corresponding DCT coefficients (EQ 11, column 218). The feature is also disclosed in Fig. 2 (component 401-33) and Fig. 37 (component denoted as "Inverse DCT"). In the Fig. 37, at the output, there are motion vectors, which are signals requesting motion compensations on the video data of macroblocks described at least in column 151, lines 14-30.

For that reason, the amended feature does not overcome the teachings of cited references.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akiwumi-Assani et al. (US Patent 5,532,744) and Jones (US Patent 5,724,537).

Regarding claim 1, Akiwumi-Assani et al. disclose a decoding device for decoding a coded stream (Fig. 1 and Abstract), the device comprising: a plurality of decoding means for decoding the coded stream (Fig. 1 and Abstract); and decoding control means for controlling the plurality of decoding means to operate in parallel (Fig. 1; Abstract; column 5, lines 13-15); wherein a value of a register stored by said decoding control means is increased by 1 each time a unit of said coded stream is decoded by said plurality of decoding means (column 5, lines 49-60); and the decoding control means supplies parameters of a unit of the coded stream that is indicated by said value of the register to the respective one of the plurality of decoding means and causes the respective one of the plurality of the decoding means to decode the unit of the coded stream (column 5, lines 49-60).

However, Akiwumi-Assani et al. do not disclose each of the plurality of decoding means comprises: an inverse DCT circuit for inversing DCT on the decoded coefficient data, wherein each of the plurality of decoding means sends a signal requesting a motion compensation of a macroblock; the decoding control means sequentially detects a processing status of the plurality decoding means and when the decoding control means detects that a respective one of the plurality of decoding means finishes a processing of decoding, the decoding control means supplies parameters of a unit of the coded stream that is indicated by said value of the register to the respective one of

the plurality of decoding means and causes the respective one of the plurality of the decoding means to decode the unit of the coded stream.

Jones discloses each decoding means comprises: an inverse DCT circuit for inversing DCT on the decoded coefficient data (column 133, line 35 – column 135, line 3; column 216, line 35 – column 220, line 45; Fig. 2; Fig. 37; also see “Response to Arguments above), wherein each decoding means sends a signal requesting a motion compensation of a macroblock (column 151, lines 14-30; Fig. 37; also see “Response to Arguments” above); a control means sequentially detects a processing status of the plurality processing means and when the control means detects that a respective one of the plurality of processing means finishes a processing, the control means supplies parameters of a unit of the stream to the respective one of the plurality of processing means and causes the respective one of the plurality of the processing means to process the unit of the stream (column 251, lines 13-40; column 249, lines 3-6; column 258, lines 13-22; column 248, lines 61-65).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the inverse DCT circuit, motion compensation requesting, and the control means disclosed by Jones into the decoding device disclosed by Akiwumi-Assani et al. to control the decoders in parallel that is compatible with MPEG standard, which uses IDCT and motion compensation in decoding. The incorporate feature would speed up the processing because it keeps the resources busy as long as possible according to MPEG standard.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571)270-1116. The examiner can normally be reached on IFT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung Q Dang/
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621